Cognitive Disengagement Syndrome

A plain-language guide to bring to your appointment with your prescriber

What is CDS?

CDS is a recognized pattern of attention difficulties. It is separate from ADHD's hyperactivity, and it is different from ordinary distractibility. It was studied for decades under the name *sluggish cognitive tempo*; in 2023 an international group of researchers agreed on the new name. It is not yet a formal DSM diagnosis, but decades of research show it is a distinct condition, and that it adds real impairment on top of ADHD (Adler et al., 2021; Becker et al., 2023).

The core symptoms

Daydreaming	the mind drifts even when you want to focus
Mental fog	thinking feels cloudy or confused; easy to get “spaced out”
Drowsiness	sleepy and low-energy, even after good sleep
Slowed thinking and movement	processing and responding take longer than expected
Hard to get started	initiating a task is the difficult part, not staying with it
Lock-ups	juggling more than one thing at once can freeze the whole system

In a large community sample, about 6% of adults met criteria for CDS, roughly half of them with ADHD. The group with both was more impaired across 15 areas of life than the group with ADHD alone (Adler et al., 2021).

Why this sheet matters: CDS symptoms are almost never measured in routine ADHD care, so they often go untreated even when they are the main source of difficulty. This guide is here so you and your prescriber can talk about them directly.

How CDS differs from ADHD inattention

The difference is easiest to feel from the inside:

With ADHD, you can usually get started and focused, but something pulls you away.	With CDS, engaging in the first place is the hard part: the mind feels foggy, and starting takes real effort.

Two dimensions that matter for treatment

Researchers separate CDS symptoms into two dimensions, and the distinction turns out to matter for medication:

Daydreaming dimension	Confusion, fog, being lost in thought. Affects attention and memory.
Sluggish / sleepy dimension	Low energy, slowness, drowsiness. Most tied to school and organizational problems, and the dimension that predicts a weaker response to methylphenidate (Froehlich et al., 2018).

Knowing which dimension is strongest for you is useful information for your prescriber, because the medication evidence looks different for each. If your lock-ups come with fog and sleepiness rather than racing distraction, that points toward the sluggish/sleepy profile described on the next page.

What the medication research shows

Only a handful of medication studies have measured CDS symptoms separately from ADHD symptoms. Here is what they found. The evidence is preliminary, and no medication class is clearly superior; the right choice depends on your symptom profile and how you tolerate each option.

Methylphenidate (Ritalin, Concerta)

In a randomized dose-response trial, higher sluggish/sleepy scores predicted being a methylphenidate nonresponder, and blunted the dose response for inattention. Later studies confirm that CDS symptoms can weaken the methylphenidate response (Froehlich et al., 2018; Wiggs et al., 2023).

Lisdexamfetamine (Vyvanse)

The only controlled trial in adults so far: 38 adults with ADHD and CDS took lisdexamfetamine or placebo for four weeks each. Lisdexamfetamine improved CDS symptoms with a moderately large effect (d ≈ 0.6–0.7), alongside large improvements in ADHD symptoms and executive function, and it was well tolerated (Adler et al., 2021).

Atomoxetine (Strattera)

In placebo-controlled trials in young people, atomoxetine reduced CDS symptoms with a moderate effect, and the improvement held even after accounting for ADHD symptom change. That suggests it works on the CDS dimension itself, not just on generic alertness (McBurnett et al., 2017; Wiggs et al., 2023).

A 2026 meta-analysis pooled all available trials: medications overall showed a moderate improvement in CDS symptoms (g = 0.39), with lisdexamfetamine showing the largest single-study effect in adults, and stimulant and non-stimulant classes overlapping broadly. The authors call the evidence preliminary and ask for larger trials (Kılınçel et al., 2026).

Questions to bring to your prescriber

Space is left under each question for notes during the appointment.

1. Given that my lock-ups happen with fog and sleepiness rather than racing distraction, could we measure CDS symptoms directly, for example with the Barkley SCT scale, before and after any medication change?

2. What does the evidence say about which medication class fits a CDS-dominant profile, and where would lisdexamfetamine or atomoxetine fit for someone my age?

3. If methylphenidate has already been tried, would a switch, within or between medication classes, be worth considering, and what would we watch for?

4. What timeline and outcome measures should we use to judge whether the CDS symptoms themselves are improving, not just the ADHD symptoms?

This sheet is educational background for a conversation with your prescriber; it is not medical advice, and prescribing decisions belong to you and your prescriber together.

References

Adler, L. A., Leon, T. L., Sardoff, T. M., Krone, B., Faraone, S. V., & Silverstein, M. J. (2021). A placebo-controlled trial of lisdexamfetamine in the treatment of comorbid sluggish cognitive tempo and adult ADHD. *Journal of Clinical Psychiatry*, *82*(4), 20m13687.

Becker, S. P., Willcutt, E. G., Leopold, D. R., Fredrick, J. W., Smith, Z. R., Jacobson, L. A., et al. (2023). Report of a work group on sluggish cognitive tempo: Key research directions and a consensus change in terminology to cognitive disengagement syndrome. *JAACAP*, *62*(6), 629–645.

Froehlich, T. E., Becker, S. P., Nick, T. G., Brinkman, W. B., Stein, M. A., Peugh, J., & Epstein, J. N. (2018). Sluggish cognitive tempo as a possible predictor of methylphenidate response in children with ADHD: A randomized controlled trial. *Journal of Clinical Psychiatry*, *79*(2), 17m11553.

Kılınçel, Ş., Bulut, F., Göksel, P., Usta, M. B., & Kılınçel, O. (2026). Preliminary efficacy of pharmacological treatments on sluggish cognitive tempo (cognitive disengagement syndrome): A systematic review and meta-analysis. *Frontiers in Psychiatry*, *17*, 1787612.

McBurnett, K., Clemow, D., Williams, D., Villodas, M., Wietecha, L., & Barkley, R. (2017). Atomoxetine-related change in sluggish cognitive tempo is partially independent of change in ADHD inattentive symptoms. *J Child Adolesc Psychopharmacol*, *27*(1), 38–42.

Wiggs, K. K., Froehlich, T. E., & Becker, S. P. (2023). Pharmacologic management of cognitive disengagement syndrome (CDS) and implications for ADHD treatment. *CNS Drugs*, *37*(4), 293–304.